

WHAT IS CLAIMED IS:

1. A method of inducing immune tolerance in a mammal to an immunogenic peptide or protein comprising: administering to said mammal a synthetic immune system toleragen comprising a 2 to 20 amino acid hydrophobic peptide linked to the N-terminus or C-terminus of said immunogenic peptide or protein, under conditions such that said immune tolerance is induced.

2. The method according to claim 1, wherein said mammal is a primate.

3. The method according to claim 2, wherein said primate is a human.

4. The method according to claim 1, wherein the hydrophobic peptide comprises 5 to 15 amino acids.

5. The method according to claim 2, wherein the hydrophobic peptide comprises 7 to 13 amino acids.

6. The method according to claim 1, wherein the hydrophobic peptide is a segment from a HIV or HIV-related virus protein.

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7. The method according to claim 1, wherein the hydrophobic peptide is AVGIGALFLGFL.

8. The method according to claim 1, wherein the immunogenic peptide or protein is an acetylcholine receptor protein.

9. The method according to claim 1, wherein the immunogenic peptide or protein is an acetylcholine receptor protein, or fragment thereof.

10. The method according to claim 1, wherein the immunogenic peptide or protein is an insulin protein, or fragment thereof.

11. The method according to claim 1, wherein the immunogenic peptide or protein is a TSH receptor protein, or fragment thereof.

12. The method according to claim 1, wherein the immunogenic peptide or protein is an autoimmune T cell antigen, or fragment thereof.

13. The method according to claim 1, wherein the immunogenic peptide or protein is a retinal S protein, or fragment thereof.

14. The method according to claim 1 wherein the immunogenic peptide or protein is a B cell determinant or a protein that induces pathogenic B cell antibody production in an autoimmune or inflammatory disease.

15. The method according to claim 1 wherein the hydrophobic part of the toleragen is any hydrophobic peptide from a transmembrane region of a transmembrane protein, or is a random mix of hydrophobic amino acids.

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